

Complexity and criticalness in IS and IT projects

Short Description of the Proposed Track

Interaction between IS and IT project complexity and formal project management approaches can raise many interesting issues. When project management teams approach their task with detailed plans and tight controls, rigidities may be introduced so that it becomes difficult for a team to respond to unpredictable changes in the project environment. Tight controls intended to reduce project complexity and risk can then have the effect of increasing them, thus reducing capability to achieve project goals. In order to address these problems, it is necessary to identify factors contributing to project complexity, and to identify and measure the risks, threats and criticalness arising from these factors. It then becomes possible to consider ways to manage these risks within acceptable levels.

Project management is a managerial science discipline, dealing with all phases of the project life cycle: initiating, planning, executing, controlling and closing. The aim is to manage a project team so that all project goals are achieved effectively, according to specific project criteria. Increasing complexity in contemporary projects can create dangerous vulnerabilities. Complexity can be due to many factors arising both in the environment and the constraints of a project, and in the choices made in pursuit of its goals. Four aspects are considered to contribute to complexity in large, contemporary IS or IT projects, namely technical, cost, schedule, and political. In order to assess potential project success and value to the organization, ability to evaluate project complexity is crucial. Contemporary projects comprise a large number of tasks, resources and constraints. They are subject to influences from both internal project factors and from various stakeholder groups in the project environment. There is a synergy between complexity, scale and risk in projects and all the factors that contribute to them.

Invited contributions: full research papers and research in progress papers.

Possible topics include, but are not restricted to:

- IS project management
- Complexity of project portfolio
- IS project risk and complexity
- IS project criticalness and threats
- Measurement of IS project complexity, risk and threats factors
- Multiple criteria evaluation of project risk
- Multiple criteria decision making in project management
- Modelling of synergy of IS project risk factors
- IS project uncertainty and risk management
- Methods to deal with IS project complexity

References

- Aloini, D., Dulmin, R., Mininno, V.: Risk management in ERP project introduction: Review of the literature. *Information & Management* 44 (2007) 547-567.
- Baccarini, D.: The concept of project complexity a review, *International Journal of Project Management* 14 (1996) 201-204.
- Jun, L., Qiuzhen, W., Qingguo, M.: The effects of project uncertainty and risk management on IS development project performance: A vendor perspective, *International Journal of Project Management* 29 (2011) 923-933.
- Lu, Y., Luo, L., Wang, H., Le, Y., Shi, Q.: Measurement model of project complexity for large-scale projects from task and organization perspective. *International Journal of Project Management* 33 (2015) 610-622.
- Thomas, J., Mengel, T.: Preparing project managers to deal with complexity - Advanced project management education, *International Journal of Project Management* 26 (2008) 304-315.
- Vidal, L.A., Marle, F., Bocquet, J-C.: Measuring project complexity using the Analytic Hierarchy Process, *International Journal of Project Management* 29 (2011) 718-727.
- Daniel, E.M., Ward, J.M., Franken, A.: A dynamic capabilities perspective of IS project portfolio Management, *Journal of Strategic Information Systems* 23 (2014) 95-111.
- Martin, N.L., Pearson, J.M., Furumo, K.: IS Project Management: Size, Practices and the Project Management Office, *Journal of Computer Information Systems* 47 (2007) 52-60.
- Tesch, D., Kloppenborg, T.J., Frolick, M.N.: IT Project Risk Factors: The Project Management Professionals Perspective, *Journal of Computer Information Systems* 47 (2007) 61-69.

Publishing Opportunities in Leading Journals

We are exploring the possibilities for a special issue in the

International Journal of Project Management

Track Co-Chairs

1	Name - Surname (primary contact)	Helena Brozova
	Title	Assoc. Prof.
	E-mail	brozova@pef.czu.cz
	Affiliation	Dept. of Systems Engineering, Faculty of Economics and Management Czech University of Life Sciences, Prague, Czech Republic
	URL	
	Short Biography	Helena works as an Associate professor at the Department of Systems Engineering, Faculty of Economics and Management, Czech University of Life Sciences Prague. She has Master Degree in Operations Research and Systems Theory at the Charles University in Prague and PhD. Degree in the Sector Economics and Economics of Enterprises at FEM CULS Prague. Her main areas of research interest

		are Multiple-criteria decision making, Project management, Mathematical modelling and Systems theory.
2	Name - Surname	Alessio Ishizaka
	Title	Prof.
	E-mail	alessio.ishizaka@port.ac.uk
	Affiliation	Centre for Operational Research and Logistics, University of Portsmouth, UK
	URL	
	Short Biography	Alessio is a Professor in Decision Analysis, Research Lead for the Operations and Systems Management subject group and Deputy Director of the Centre for Operational Research and Logistics. His research interest is to develop, validate and apply new methods to help companies to take better decisions. His textbook Multicriteria Decision Analysis: methods and software is used all over the world.
3	Name - Surname	Martin Flegl
	Title	Assist. Prof.
	E-mail	martin.flegl@ulsa.mx
	Affiliation	Universidad La Salle, Facultad de Negocios, Mexico City, Mexico
	URL	
	Short Biography	Martin holds PhD degree in Systems Engineering from Faculty of Economics and Management, Czech University of Life Sciences Prague, he has studied at Catholic University in Lyon, France and Plymouth University, United Kingdom. Nowadays, he is a full-time researcher at Business School, La Salle University in México City. The research interests are efficiency and performance analysis in social, economic and education areas. He teaches Operations research and Decision-making theory.

Track Associate Editors

1	Name-Surname	Ivan Valicek
	Title	Dipl. Ing.
	E-mail	i.valicek@bluewin.ch
	Affiliation	Ex-project manager Siemens Schweiz AG
2	Name-Surname	Petr Fiala
	Title	Prof.
	E-mail	pfiala@vse.cz
	Affiliation	Department of Econometrics, Faculty of Informatics and Statistics, University of Economics, Prague, Czech Republic
3	Name-Surname	Petra Pavlickova
	Title	Assist. Prof.
	E-mail	petra.pavlickova@fit.cvut.cz
	Affiliation	Department of Software Engineering, Faculty of Information

ECIS 2018 TRACK 08

"BEYOND DIGITIZATION - FACETS OF SOCIO-TECHNICAL CHANGE", 23RD -28TH, JUNE, 2018, IN UNIVERSITY OF PORTSMOUTH, UK, FOR THE 26TH EUROPEAN CONFERENCE ON INFORMATION SYSTEMS

		Technology, Czech Technical University in Prague, Czech Republic
4	Name-Surname	Tomas Subrt
	Title	Assoc. prof.
	E-mail	subrt@pef.czu.cz
	Affiliation	Dept. of Systems Engineering, Faculty of Economics and Management Czech University of Life Sciences, Prague, Czech Republic
5	Name-Surname	Davide Aloini
	Title	Assoc. Prof.
	E-mail	davide.aloini@gmail.com
	Affiliation	Department of Energy, Systems, Territory, and Construction Engineering, University of Pisa, Italy
6	Name-Surname	Klara Hennyeyova
	Title	Assoc. prof.
	E-mail	klara.hennyeyova@uniag.sk
	Affiliation	Department of Informatics, Faculty of Economics and Management, Slovak university of Agriculture, Nitra, Slovak
7	Name-Surname	Vladimir Bolek
	Title	Assist. Prof.
	E-mail	vladimir.bolek@euba.sk
	Affiliation	Department of Information Management, Faculty of Business Management, University of Economics in Bratislava, Slovak republic
8	Name-Surname	Miroslav Plevny
	Title	Assoc. prof.
	E-mail	plevny@fek.zcu.cz
	Affiliation	Department of Economics and Quantitative Methods, Faculty of Economics, University of West Bohemia
9	Name-Surname	Pierluigi Zerbino
	Title	Researcher
	E-mail	pierluigi.zerbino@for.unipi.it
	Affiliation	University of Energy, Systems, Territory and Construction Engineering, University of Pisa, Italy
10	Name-Surname	Maria Barbati
	Title	Senior Lecturer
	E-mail	maria.barbati@port.ac.uk
	Affiliation	Department of Operations and Systems Management, Portsmouth Business School, University of Portsmouth, UK
11	Name-Surname	Adrian Benfell
	Title	Senior Lecturer
	E-mail	adrian.benfell@port.ac.uk

ECIS 2018 TRACK 08

"BEYOND DIGITIZATION - FACETS OF SOCIO-TECHNICAL CHANGE", 23RD -28TH, JUNE, 2018, IN UNIVERSITY OF PORTSMOUTH, UK, FOR THE 26TH EUROPEAN CONFERENCE ON INFORMATION SYSTEMS

	Affiliation	Department of Operations and Systems Management, Portsmouth Business School, University of Portsmouth, UK
12	Name-Surname	Francesco LOLLI
	Title	Researcher
	E-mail	francesco.lolli@unimore.it
	Affiliation	Center for Industrial Research and Technology Transfer, University of Modena and Reggio Emilia, Italy
13	Name-Surname	Cristina Lopez Vargas
	Title	Associate professor
	E-mail	clpvar@upo.es
	Affiliation	Department of Business Organization and Marketing, Pablo de Olavide University, Spain
14	Name-Surname	Salem Chakhar
	Title	Research Fellow
	E-mail	salem.chakhar@port.ac.uk
	Affiliation	Department of Operations and Systems Management, Portsmouth Business School, University of Portsmouth, UK